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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,797	10/20/2000	Wenda Mason	23261/162	7141
7	590 09/10/2002			
DORSEY & WHITNEY LLP			EXAMINER	
PILLSBURY CENTER SOUTH 220 SOUTH SIXTH STREET MINNEAPOLIS, MN 55402-1498			PAK, JOHN D	
			ART UNIT	PAPER NUMBER
			1616	
			DATE MAILED: 09/10/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

· . ·	Application No.	Applicant(s)				
	09/692,797	MASON, WENDA				
Office Action Summary	Examiner	Art Unit				
	JOHN D PAK	1616				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, my within the statutory minimum will apply and will expire SIX (6), cause the application to become	nay a reply be timely filed  of thirty (30) days will be considered timely. ) MONTHS from the mailing date of this communication.  me ABANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 22 I	<u> March 2002</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.	•				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	_					
4) Claim(s) 1-12 is/are pending in the application.						
4a) Of the above claim(s) <u>4.8 and 9</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-3,5-7 and 10-12</u> is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	r election requirement	••				
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the	e drawing(s) be held in a	abeyance. See 37 CFR 1.85(a).				
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the prio application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	ireau (PCT Rule 17.2(	(a)).				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a)  The translation of the foreign language pro</li> <li>15)  Acknowledgment is made of a claim for domest</li> </ul>						
Attachment(s)	•					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notic	view Summary (PTO-413) Paper No(s) ce of Informal Patent Application (PTO-152) r: .				

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Claims 1-12 are pending in this application.

Applicant's election of "isopropylamine glyphosate" and sodium salt of pelargonic acid as the two active ingredients in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 4 and 8-9 are withdrawn from further consideration as being directed to non-elected subject matter. Claims 1-3, 5-7 and 10-12 will presently be examined to the extent that they read on the following expanded elected subject matter: isopropylamine salt of N-(phosphonomethyl)glycine, i.e. "glyphosate," + one, two or three fatty acid-containing simple mixtures of fatty acids or salt thereof, wherein one of the fatty acid is pelargonic acid/salt.

Claims 1, 5, 7 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) Claims 1, 5, 10-11 read on "glyphosate-based active ingredient" without further limitations. This term is indefinite as to its metes and bounds. Technically speaking, "glyphosate" is isopropylamine salt of N-(phosphonomethyl)glycine. It is difficult to understand what is meant by "glyphosate-based" when the specification discusses "derivatives" of N-(phosphonomethyl)glycine. See specification p. 4, lines 17-19 and pp. 8-9. Since the term "glyphosate" and "N-(phosphonomethyl)glycine" already have a clear and definite meaning in the art, applicant's use of the term "glyphosate-based" to mean some general formula that is even

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broader than N-(phosphonomethyl)glycine, as in the bottom of specification p. 8, is confusing.

Add to that the expansion of the scope with "derivatives," which is without limit as to how far and how much derivation may be permitted, and one skilled in the art would not be able to determine the metes and bounds of applicant's terminology.

(2) Claims 7 and 12 recite ratios without specifying what type of ratios they are, e.g. ratios by weight, volume, mole, etc.

Claims 1-3, 5-7 and 10-12 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. It appears from the specification disclosure (p. 4, lines 5-7) that use of each ingredient, i.e. glyphosate-based ingredient and fatty acid based ingredient, at concentrations below what is "recommended for herbicidal activity of each ingredient alone" is critical or essential to the practice of the invention, but such feature is not included in the claim(s); and the full scope of the claims are therefore not enabled by the disclosure. While applicant is cautioned against reciting "recommended" in the claims, it appears that the inventive concept of using less than such amounts is critical or essential to the invention. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The following is a quotation of 35 U.S.C.  $\S$  103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3, 5-7 and 10-11 are rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Wells, Franz, Franz and WO 89/03178 in view of Sampson and WO 90/07275 (see below for more specific citations of the different Franz's).

At the outset, it is noted that this ground of rejection does not apply to subject matter encompassed by claims 1-17 of U.S. Patent No. 5,196,044. This ground of rejection applies to subject matter of the instant claimed invention that is not encompassed by said claims of the 5,196,044 patent.

Wells (Plant Protection Quarterly, Vol. 4(4), pp. 156-64) teaches that post-rainfall herbicidal activity of glyphosate is improved with the addition of 0.125 and 0.22 % v/v of "Activator 90", which contains free fatty acids and other surface active agents (see p. 158, second full paragraph of third column; Tables 2-8). It is the examiner's position that "free fatty acids" from Wells' disclosure encompasses the type of fatty acids recited in the instant claims. Wells utilized glyphosate in a pre-formulated product, Nufarm Glyphosate CT, which contains 0.45 kg a.i./L (p. 158, third column). Said glyphosate product was applied at 0.54 kg a.i./ha by delivering 60 liters of the diluted composition/ha (see p.158, third column, third and fourth full paragraphs).

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Therefore, with 0.125 to 0.22% v/v of fatty acid containing Activator 90, Wells' herbicidal composition and method appear to meet the percentage and application features of the claimed invention.

Franz (US 3,977,860) teaches the herbicidal utility of glyphosate-based compounds and their salts (see columns 1-3). Use of said herbicidal compounds with other herbicides (column 5, lines 14-16), and conventional herbicidal additives such as emulsifier, surfactant, oil and/or alcohol (columns 14-15) are disclosed. Application rates of 0.01 to 20+ lbs/acre is also disclosed (column 16, lines 51-54).

Franz (The Herbicide Glyphosate, Grossbard et al. (eds.), pp. 3-4 and 225-226) is cited to show that (1) glyphosate is a well known translocating herbicide (p.3), and (2) oil adjuvants should be formulated with surfactants if they are to give a stable sprayable emulsion of glyphosate with water.

WO 89/03178 teaches that  $C_{6-18}$  fatty acids and their salts possess herbicidal properties (pp. 3 & 5-6). 1:1 Mixture of pelargonic acid (nonanoate) salt + capric acid (decanoate) salt is specifically disclosed (p. 4, first paragraph for specific disclosure; p. 3, first paragraph for broader disclosure). When used with translocating herbicidal ammonium compounds, improved herbicidal efficacy is taught (p.5 first paragraph). When used with said translocating herbicides, fatty acids were at concentrations that are within the claimed concentrations of the instant application (see for example, page 12 Table 4).

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Sampson is cited to show that fatty acids such as lauric (C12), palmitic (C16), stearic (C18), oleic (C18) and linoleic (C18) improve the efficacy of glyphosate (column 1, lines 23-25; column 2, lines 19-29; column 4, lines 36-39 & 63). WO 90/07275 teaches that salts of N-(phosphonomethyl)glycine can be used with fatty acids and their salts (see p.7 lines 27-30 & p. 12 lines 13-15).

The difference between the claimed invention and the cited references is that herbicidal combination of isopropylamine salt of N-(phosphonomethyl)glycine with the fatty acid salts (and the acid forms) under examination here have not been explicitly disclosed by the references. However, the references fairly suggest (1) the herbicidal combination of the ingredients, (2) at concentration amounts recited by applicant (see e.g. WO 89/03178, page 12, Table 4 & Wells). Therefore, the claimed invention, as a whole, would have been prima facie to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been fairly suggested by the combined teachings of the references.

Applicant's specification data are noted, but they fall far short of being commensurate in scope with the claimed subject matter. Therefore, they cannot serve to rebut the <u>prima facie</u> case of obviousness for the entire scope of the claims under examination here.

Applicant is advised that this ground of rejection does not apply to claim 12, to the extent that claim 12 is solely limited to the elected subject matter.

For the foregoing reasons, all claims must be refused. No claim is allowed.

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A facsimile center has been established in Group 1200. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machines are (703) 308-4556 or (703) 305-3592.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pak whose telephone number is (703) 308-4538. The Examiner can normally be reached Monday through Friday from 7:00 AM to 3:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jose Dees, can be reached on (703) 308-4628.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1235.

JOHN PAK PRIMARY EXAMINER GROUP 1602